

Amended Patent Claims

1. (original) A method of depositing compounds on a substrate by means of a metal organic gas phase deposition and a first mixture of at least one carrier gas and at least one metal organic and a second mixture of at least one carrier gas and at least one Group V compound or Group VI compound whereby both mixtures are separately fed into a MOCVD apparatus, characterized in that the first mixture of at least one carrier gas and at least one metal organic is fed into the apparatus between the substrate and the second mixture of at least one carrier gas and at least one Group V compound or Group VI compound.

2. (original) The method according to the preceding claim, characterized in that for the first mixture at least one Group II compound is selected as the metal organic.

3. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized by
dimethylzinc as the metal organic.

4. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized by
(Ba, Sr) compounds as metal organics.

5. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized in
that for the first mixture at least one Group III
compound is selected as the metal organic.

6. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized by
trimethylgallium and/or trimethylaluminum and/or
trimethylindium as metal organics.

7. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized in
that for the first mixture at least one Group IV compound
is selected as the metal organic.

8. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized by
titaniumisopropoxide as the metal organic.

9. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized in
that AsH₃ and/or PH₃ and/or NH₃ is selected as the Group V
compound.

10. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized in
that oxygen or diethyltellurium is selected as the Group
VI compound.

11. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized in
that III/V compounds and/or II-VI compounds are
deposited.

12. (currently amended) The method according to
~~one of the preceding claims~~ claim 1, characterized in
that GaN, AlN or InN or alloys of these compounds are
deposited.

13. (currently amended) The method according to ~~one of the preceding claims~~ claim 1, characterized in that an oxide, especially (Ba, Sr) titanate is deposited.

14. (currently amended) The method according to ~~one of the preceding claims~~ claim 1, characterized in that hydrogen and/or nitrogen and/or argon is used as the carrier gas.

15. (original) A MOCVD apparatus for gas phase deposition with at least two gas inlets (4, 5), characterized by means for flexibly introducing gases into the apparatus.

16. (original) The MOCVD apparatus according to claim 15 characterized in that between the gas inlets (4, 5) and the supply vessels for the gases to be fed into the apparatus, gas collecting lines (51, 52, 53) are provided in which there are arranged at least two valves (V1, V2, V3).

17. (currently amended) The method according to ~~one of claims 1 to 14~~ claim 1 characterized in that the

substrate is selected from SiC, sapphire, silicon, InP (indiumphosphide), InAs (indiumarsenide), GaAs (galliumarsenide), GaN (gallumnitride), AlN (aluminumnitride), GaSb (galliumantimonide) and/or GaP (galliumphosphide).